



Re: Docket ID No. EPA-HQ-OAR-2009-0171

Robert Graham o GHG-Endangerment-Docket

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Dir Sirs,

CO2 is not a dangerous gas. Indeed, it is as likely to help human welfare (by fertilizing crops) as it is to hurt it. The "proof" of global warming caused by man-made CO2 is bad science, where computer models have replaced empirical evidence, and non-reproducible statistical reconstructions have removed margins of uncertainty. I am not a climatologist, but an expert in computer models and the scientific method, and it is clear the science is doubtful at best, and willfully fraudulent at worse.

It is clear that CO2 is a major greenhouse gas, and that mankind has caused more of it. It is equally clear that massive increases in CO2 will, by itself, only cause small changes in temperature. That is because CO2 blocks primarily one small band in the infrared spectrum, and it already blocks nearly 100% of that band. Instead, the theory of manmade global warming is that the climate is inherently unstable, and that a small external change (such as that caused by CO2) will result in large internal changes in temperature. For example, slightly warmer air holds more water vapor, which in turn causes more greenhouse effect (water is a more important greenhouse gas than CO2), warming the air still further.

As described by the IPCC, this theory of an unstable climate and man-made global warming rests on two foundations: computer climate models, and historical reconstructions of temperatures.

Computer climate models attempt to model the global climate, especially the circulation of air and ocean currents. The reason the IPCC believes these models rests solely on the fact that they accurately predict past temperatures. As an expert in computer models, I know this to be wrong. Computer models reproduce historic temperature because they are "parameterized" and "tuned" to produce those temperatures. They don't predict El Nino, for example. Instead, the effects of El Nino are measured and then input as large tables within the model, as if it were some external event. It is tables like these that drive their end results, not an accurate model of climate processes. As such, they neither accurately describe the current climate, nor can they predict future climate. They are similar to financial models that accurately predict past stock-market performance, but which fail to make their authors money by predicting future prices.

Reconstructions of historic temperatures, such as those using isotope ratios and tree rings, attempt to compare current temperatures to the past. We have accurate measurements of global temperatures of the last 30 years from satellites, but we do not know whether these temperatures are unprecedented (and therefore likely caused by man) or within the band of natural variation. The reconstructions used by the IPCC have clear scientific errors. An example of this is the so-called "Hockey Stick" graph showing modern temperatures significantly higher than in the recent past. Science is based upon the idea of reproducible results, yet the authors of that study refused for years to disclose their data and methods. When they were forced to disclose everything, it was found that they used clearly questionable methods and data

to come up with their results, such as reversing the trends of certain proxies so that instead of showing a cooling, they showed warming. Despite the clear scientific malfeasance, the IPCC continues to rely upon such studies with similar scientific errors.

I urge the EPA to rely upon the scientific method to make their decisions. I urge them to insist upon empirical validation of the climate processes rather than computer models. I urge them to insist upon research that is fully disclosed and reproducible.

Regards,

Robert Graham
CEO Errata Security